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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/673,134	09/30/2003	Keith Istvan Farkas	200313156-1	3702

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EXAMINER	
BHAT, ADITYA S	
ART UNIT	**PAPER NUMBER**
2863	

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	12/27/2006	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary	Application No.	Applicant(s)	
	10/673,134	FARKAS ET AL.	
	Examiner	Art Unit	
	Aditya S. Bhat	2863	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *26 September 2006*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-5,7-15 and 17-32* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-5,7-15 and 17-32* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *30 September 2003* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-5, 7-15 and 17-32 are rejected under 35 U.S.C. 102(b) as being anticipated by David et al. (USPN 6,018,203)

With regards to claim 1, David et al. (USPN 6,018,203) teaches a method of managing load in a power system comprising:

determining whether a load demand(Col. 3, Lines 65-66) on at least one power system component (See Figure 1A) of a plurality of power system components (See Figure 1A) needs to be varied, (Col.4, Lines1-5) wherein load demands includes a percentage of' electrical current drawn (Col.4, Lines1-3) by the at least one power system component;

calculating a new load demand (Col.4, Lines 5-8) to be placed on the at least one power system component (See Figure 1A) based on a load demand on at least one other functioning power system component (Col. 4, Lines 4-6) of the plurality of power system components(See Figure 1A) in response to determining the load demand on the at least one power system component needs to be varied (Col. 4, lines 1-10) and

controlling the load demand (Col.4 Lines 4-10) on the at least one power system component to be equal (Col.4, Lines 3-5) to the calculated new load demand and the

load demand on the at least one other functioning power system component; (Col. 4, lines 1-10)

With regards to claim 2, David et al. (USPN 6,018,203) teaches determining whether load demand on the at least one other power system component) needs to be varied further comprises

determining whether a failure of one of the plurality of power system components occurred. (Col. 4, lines 1-10)

With regards to claim 3, David et al. (USPN 6,018,203) teaches determining a new load demand to be placed on the at one power system component further comprises:

determining a total load demand on the plurality of power system components, (See Figure 1A) wherein the plurality of power system components are similar to the failed power system component and are functioning; (col. 3, lines 64-67) and

dividing the total load demand equally among the plurality of power system components. (Col. 4, lines 4-8)

With regards to claim 4, David et al. (USPN 6,018,203) teaches determining a new load demand to be placed on the at least one power system component further comprises determining a new load demand that is less than a maximum loading value of the at least one power system component. (Col. 2, Lines 14-16)

With regards to claim 5, David et al. (USPN 6,018,203) teaches calculating a new load demand to be placed on the at least one power system component further comprises:

storing optimal load demands for the plurality of power system components; and (Col.4, Lines 45-48)

determining new load demands for the plurality of power system components based on the stored load demands. (Col. 4, lines 1-10)

With regards to claim 7, David et al. (USPN 6,018,203) teaches determining whether a load demand on at least one power system component of a plurality of power system components needs to be varied further comprises

determining whether a request to change the load demand of the at least one power system component is received. (Col 4, lines 7-10)

With regards to claim 8, David et al. (USPN 6,018,203) teaches the request is a power system component maintenance-related request. (Col 4, Lines 1-10) The processor being queried to vary the load demands in response to the current exceeding a certain limit is being interpreted as a maintenance-related request.

With regards to claim 9, David et al. (USPN 6,018,203) teaches determining whether a load demand on at least one power system component of a plurality of power system components needs to be varied further comprises

determining whether load demands on the plurality of power system components are balanced based on a balancing scheme; (col. 3-4, Lines 67 & 1-4) and

determining a new load demand comprises determining new load demands for the plurality of power system components (Col. 4, Lines 3-6) based on the balancing scheme in response to the load demands on the plurality of power system components being unbalanced. (Col.4, Lines 20-28)

The load-balancing scheme as claimed in claim 9 has been interpreted as set of instructions used to balance the load of the power system. Although the David reference does not recite a balancing scheme verbatim, the processor inherently has some sort of scheme/instructions to perform the function of a balancing operation as disclosed in the above-cited portion of David et al. reference. That is the processor controls balancing by selecting which of the switches are actuated.

With regards to claim 10, David et al. (USPN 6,018,203) teaches the balancing scheme (see above) is associated with at least one of dividing a total load demand on the one or more power system components substantially equally (col.4, lines 5-7), providing substantially equal spare capacity for the one or more power system components (col. 4, lines 1-8), preventing any of the one or more power system components from exceeding a maximum loading value (Col 4,Lines 1-3), and providing greater spare capacity for critical loads. (Col 9,Lines 8-9)

With regards to claim 11, David et al. (USPN 6,018,203) teaches controlling the load demand (Col 4,Lines 2-3) on the at least one power system component to be equal (Col 4,Lines 4-5) to the determined new load demand further comprises directing the at least one power system component to change its load demand to the new load demand. (Col 4,Lines 5-10)

With regards to claim 12, David et al. (USPN 6,018,203) teaches controlling the load demand on the at least one power system component to be equal to the determined new load demand further comprises:

directing a power system component drawing current from the at least one power system component to vary its current draw on the at least one power system component. (Col 2, Lines 13-16)

With regards to claim 13, David et al. (USPN 6,018,203) teaches the plurality of power system components (See Figure 1A) comprises power system components substantially located in a data center and providing power to meet the load demand of a plurality of computer systems housed in the data center.

The limitations of the claimed process must distinguish from the prior art in terms of the process performed rather than in terms of the use to which the resulting device will be put. Therefore all limitations of the claim are to be directed towards the process, and those limitations that are directed towards the use to which the device formed by the method is put will not be given patentable weight. In this instance the prior art does not teach that the location (computer system housed in the data center) however David et al. does teach supplying/providing power. (Col. 3, lines 38-39) See also, *In re Schreiber*, 128 F.3d 1473, 1477-78, 44 USPQ2d 1429, 1431-32 (Fed. Cir. 1997); See also *In re Swinehart*, 439 F.2d210, 212-13, 169 USPQ 226, 228-29 (CCPA 1971), *In re Danly*, 263 F. 2d 844, 847, 120 USPQ 528, 531 (CCPA 1959) and "Apparatus claims cover what a device is, not what a device does." *Hewlett-Packard Co. v. Bausch & Lomb Inc.*, 909 F. 2d 1464, 1469, 15 USPQ2d 1525, 1528 (Fed. Cir. 1990).

With regards to claim 14, David et al. (USPN 6,018,203) teaches the at least one power system component comprises power system components in a level in a power grid. (Figure 1A & 1B)

With regards to claim 15, David et al. (USPN 6,018,203) teaches a system for balancing load demands on power system components comprising:

a first set of power system components in the power system; (See figure 1A &1B) and

a load manager (Col 4,Lines 2-3) calculating load demands to be placed on the first set of components (Col 4,Lines 2-7) based on a load balancing scheme and controlling (Col 2,Lines 13-16) load demands on the first set of the power system components (Col 4,Lines 1-10)

The load-balancing scheme as claimed in claim 15 has been interpreted as set of instructions used to balance the load of the power system. Although the David reference does not recite a balancing scheme verbatim, the processor inherently has some sort of scheme/instructions to perform the function of a balancing operation as disclosed in the above-cited portion of David et al. reference. That is the processor controls balancing by selecting which of the switches are actuated.

With regards to claim 17, David et al. (USPN 6,018,203) teaches the load manager is connected to a data repository storing optimal load demands (Col 4,Lines 45-48) for the first set of power system based on modeling the power system in different failure states, (Col 4,Lines 1-10) and the load manager determines the new load demands for the first set of power system components by identifying the new load demands from the stored optimal load demands that are associated with the current state of the power system. (Col 4,Lines 1-10)

With regards to claim 18, David et al. (USPN 6,018,203) teaches the load manager is operable to detect a failure of a power system component (Col 4,Lines 23-28) of the first set of power system components from the received data and to control the load demands on the first set of power system components based on the load balancing scheme (See above) in response to detecting the failure.

With regards to claim 19, David et al. (USPN 6,018,203) teaches the load manager is operable to implement the load balancing scheme (see above) in response to at least one of a received request to change the load demands on one or more of the first set of components and a determination that the load demands on the first set of power components do not meet predetermined conditions associated with the load balancing scheme. (Col 4,Lines 1-10)

With regards to claim 20, David et al. (USPN 6,018,203) teaches the load balancing scheme (see above) is associated with at least one of dividing a total load demand on the one or more power system components substantially equally (Col 4,Lines 3-5), providing substantially equal spare capacity for the one or more power System components (Col 4,Lines 3-5), preventing any of the one or more power system components from exceeding a maximum loading value (Col 4,Lines 1-10) (Col 4,Lines 26-28), and providing greater spare capacity for critical loads. (Col 9,Lines 8-10)

With regards to claim 21, David et al. (USPN 6,018,203) teaches a fast transfer load device connected to one power system component of the first set of power system components, the fast transfer load transfer device controlling load demand on the one power system component in response to detecting an over loading on the one power system component. (Col 4, Lines 36-40)

With regards to claim 22, David et al. (USPN 6,018,203) teaches the load manager implements the load balancing scheme (see above) after the fast transfer load device controls the load demand on the one power system component. (Col 4,Lines 29-40)

With regards to claim 23, David et al. (USPN 6,018,203) teaches the power system further comprises a second set of power system components (see figures 1A & 1B) receiving power from the first set of power system components, and the load manager (12; figures 1A & 1B) directs at least one power system component of the second set of power system components to vary the load demand on at least one power system component of the first set of power system components to control the load demands (Col. 2, lines 13-16) on the first set of power system components based on the load balancing scheme (see above).

With regards to claim 24, David et al. (USPN 6,018,203) teaches the load manager controls the load demands (Col 2,Lines 13-16) on the first set of power system components based on the load balancing scheme (see above) by directing at least one power system component in the first set of power system components to vary load demand. (Col 2,Lines 33-39)

With regards to claim 25, David et al. (USPN 6,018,203) teaches the first set of components comprise power system components in a level in the power system. (Figures 1A &1B)

With regards to claim 26, David et al. (USPN 6,018,203) teaches the first set of power system components comprise redundant components supplying power to the same load. (Figures 1A &1B)

With regards to claim 27, David et al. (USPN 6,018,203) teaches an apparatus for managing load demands in a power system comprising:

means for determining whether load demands on a plurality of power system components in the power system need to be varied, (Col 3-4, Lines 64-67 and 1-10) wherein load demand includes a percentage of electric current drawn (Col 4, Lines 1--10) by the at least one power system component;

means for calculating(12;Col 4, Line 5) new load demands to be placed on the plurality of power system components in response to determining the load demands need to be varied; (Col 4, Lines 1-10) and

means for controlling (Col 2, Lines 33-39) the load demands on the plurality of power system components to be equal (col. 4, lines 3-5) to the calculated new load demands such that the new load demands on the plurality of power system components are balanced. (Col 4, Lines 1-10)

With regards to claim 28, David et al. (USPN 6,018,203) teaches the means for determining whether load demands on the plurality of power system components need to be varied further comprises

means for determining (12;Col 4, Lines 1-10) whether load demands on the plurality of power system components need to be varied when a failure of one of the

plurality of power system components is detected or when the power system is in a steady state. (Col 4, Lines 1-10)

With regards to claim 29, David et al. (USPN 6,018,203) teaches a data repository means (Col 4, Lines 45-46) for storing optimal load demands for the plurality of power system components and the means for determining new load demands retrieves the new load demands from the stored optimal load demands. (Col 4, Lines 45-49)

With regards to claim 30, David et al. (USPN 6,018,203) teaches fast load transfer means connected to at least some of the plurality of power system components for varying the load demands on one or more of the power system components connected to the fast load transfer means in response to detecting an overloading of a power system component connected to the fast load transfer means. (Col 4, Lines 35-40)

With regards to claim 31, David et al. (USPN 6,018,203) teaches a second set of power system, components receiving power from the first set of power system components, (figure 1A and 1B)

wherein the load manager(12;figure 1A) is operable to send control data to the first set of power components to control the load demands, (Col 2, Lines 13-16) and

the load manager is further operable to calculate load demands (Col 4, Lines 1-10) to be placed on the second set of power system components based on the load balancing scheme (see above) and send control data to the second set of power system

components to control the load demands on the second set of power system components (Col 2, Lines 13-16)

With regards to claim 32, David et al. (USPN 6,018,203) teaches the load manager (12; figure 1A) is operable to calculate the load demands to be placed on the first set of components by determining a total load demand on the first set of components; (Col 4, Lines 1-10) and

dividing the total load demand equally among the first set of components (Col 4, Lines 5-7)

Response to Arguments

Applicant's arguments with respect to claims 1-5, 7-15 and 17-32 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Bresniker et al. (USPUB 2003/0084358) teaches a system and method for intelligent control of power consumption of distributed services during periods of reduced load,

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Aditya S Bhat whose telephone number is 571-272-2270. The examiner can normally be reached on M-F 9-5:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John Barlow can be reached on 571-272-2269. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Aditya Bhat
December 11, 2006

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